

## **FTM-10R**

**May, 2007**

### General

Frequency Range: RX: 0.5 - 1.8 MHz (AM BC)  
76 - 108 MHz (FM BC)  
108-137 MHz (Air Band)  
137-174 MHz (144 MHz HAM)  
174-222 MHz (GR1 VHF TV)  
300-420 MHz (GR2 )  
420-470 MHz (430 MHz HAM)  
470-800 MHz (GR1 UHF TV)  
800-999 MHz (GR2 USA Cellular Blocked)  
TX: 2 m /70 cm Amateur Bands  
Channel Steps: 5/6.25/8.33/(9)/10/12.5/15/20/25/50/100/200 kHz (9): AM Only  
Emission Type: F3E, F2D  
Antenna Impedance: 50 Ohms  
Frequency Stability:  $\pm$  5 ppm @ 14 $^{\circ}$  F ~ +140 $^{\circ}$  F ( $\pm$ 10 $^{\circ}$  C ~ +60 $^{\circ}$  C)  
Operating Temperature Range:  $\pm$ 4 $^{\circ}$  F ~ +140 $^{\circ}$  F ( $\pm$ 20 $^{\circ}$  C ~ +60 $^{\circ}$  C)  
Supply Voltage: Nominal: 13.8 V DC, Negative Ground  
Operating: 11.7 ~ 15.8 V, Negative Ground  
Current Consumption: RX: 0.5 A (Receive)  
(Approx.) 8.3 A / 6 A / 2A (TX, 2 m 50W / 20 W / 5 W)  
8.5 A / 6 A / 2A (TX, 70 cm 40W / 20 W / 5 W)  
Case Size (W x H x D): 4.4" x 1.5" x 7" (112 x 37.6 x 178 mm)  
(w/o knobs & connectors)  
Weight (Approx.): 2.9 lb. (1.3 kg)

### Transmitter

RF Power Output: 50/20/5 W (2 m)  
40/20/5 W (70 cm)  
Modulation Type: Variable Reactance  
Spurious Radiation: At least  $\pm$ 60 dB below  
Microphone Impedance: 2 k ohms

### Receiver

Circuit Type: FM / AM: Double-Conversion Super heterodyne  
WFM: Triple-Conversion Super heterodyne  
AM / FM Radio: Single-Conversion Super heterodyne  
Intermediate Frequencies: FM / AM: 1st: 47.25 MHz, 2nd: 450 kHz  
WFM: 1st: 45.8 MHz, 2nd: 10.7MHz, 3rd: 1MHz  
FM Radio: 130 kHz, AM Radio: 50 kHz  
Sensitivity: 5  $\mu$ V TYP for 10 dB SN (0.5-1.7 MHz, AM)  
2  $\mu$ V TYP for 12 dB SINAD (76-108 MHz, WFM)

0.8  $\mu$ V TYP for 10 dB SN (108-137 MHz, AM)  
0.2  $\mu$ V for 12 dB SINAD (137-140 MHz, FM)  
0.2  $\mu$ V for 12 dB SINAD (140-150 MHz, FM)  
0.25  $\mu$ V for 12 dB SINAD (150-174 MHz, FM)  
1  $\mu$ V TYP for 12 dB SINAD (174-222 MHz, WFM)  
0.8  $\mu$ V TYP for 10 dB SN (300-336 MHz, AM)  
0.25  $\mu$ V TYP for 12 dB SINAD (336-420 MHz, FM)  
0.2  $\mu$ V for 12 dB SINAD (420-470 MHz, FM)  
5  $\mu$ V TYP for 12 dB SINAD (470-540 MHz, WFM)  
5  $\mu$ V TYP for 12 dB SINAD (540-800 MHz, WFM)  
0.4  $\mu$ V TYP for 12 dB SINAD (800-899.99 MHz, FM)  
0.8  $\mu$ V TYP for 12 dB SINAD (900 - 999.99 MHz, FM)

\*USA Version Cellular Blocked

Squelch Sensitivity: Better than 0.16  $\mu$ V (Amateur Band)

Selectivity : NFM, AM 12 kHz / 30 kHz ( $\leq$ 6 dB /  $\leq$ 60 dB)

AF Output: 8 W @ 4 Ohm for 10 % THD (@ 13.8 V) BTL EXP SP  
4 W @ 4 Ohm for 10 % THD (@ 13.8 V) Normal EXP SP/CH

AF Output Impedance: 4-16 ohms